This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 2001070743
PUBLICATION DATE : 21-03-01

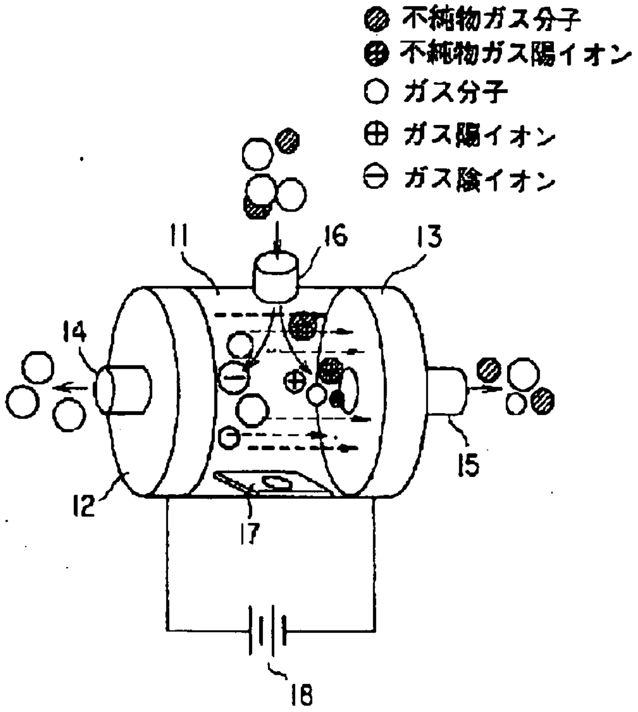
APPLICATION DATE : 01-09-99
APPLICATION NUMBER : 11247885

APPLICANT : DAI-DAN CO LTD;

INVENTOR : NAMIKI NORIKAZU;

INT.CL. : B01D 53/32 B01J 19/00

TITLE : GAS SEPARATION APPARATUS



ABSTRACT :

PROBLEM TO BE SOLVED: To separate gas molecule components contained in air current, take out purified air and separated gases and improve an effect of saving energy by ionizing the air current, applying an electric field to the ionized gases by electrodes, and separating cations and anions from each other.

SOLUTION: Air containing impurity gas molecule components is introduced into a cylindtical chamber 11 through a gas inlet member 16 and the gases are ionized by α ray from a radiation source 17. At that time, the respective gas outlet flow rates of a plurality of gas outlet members 14, 15 are properly adjusted by respective valves. Voltage is applied to a plurality of parallel flat electrodes 12, 13 from a d.c. power source to generate parallel electric fields in the cylindrical chamber 11. Consequently, electrostatic force of the electric fields is utilized to ionize the gas components and separate cations with the cathode 13 and anions with the anode 12. On the other hand, neutral gas components which are not ionized are taken out while being distributed to a plurality of the gas outlet members 14, 15.

COPYRIGHT: (C)2001,JPO